IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	:
	: Group Art Unit: 2616
Jozef Babiarz	:
	: Examiner: Raj K. Jain
Appln. No.: 10/799,703	:
	: Confirmation No.: 8971
Filed: March 15, 2004	:
	: Customer No.: 21967
For: TECHNIQUE FOR ADMISSION	:
CONTROL OF PACKET FLOWS	:

Mail Stop Appeal Brief-Patents
Commissioner for Patents.
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

Sir:

    This Reply Brief is submitted in reply to the Examiner's Answer, mailed on November 20, 2008, which responds to the Appellant's Brief, filed August 25, 2008.

I. ISSUES

    The Examiner has raised new points of argument in the Examiner's Answer to the Appellant's Brief.

II. NEW ARGUMENTS PRESENTED IN EXAMINER'S ANSWER

    The Examiner has presented the following new arguments in the Examiner's Answer to the Appellant's Brief:

1

(i) The Examiner now argues that Hadi Salim discloses that a packet flow rate is determined by a packet entering a network (e.g., Host A to Router A) by means of a packet flow control parameter (e.g., ISQ messages). The ISQ messages (e.g., column 6, lines 40-45, of Hadi Salim) indicate the level of congestion to the host via the CE bit (e.g., column 2, lines 22-30, of Hadi Salim) in order to control the flow of packets.

(ii) The Examiner now argues that Hadi Salim explicitly discloses the use of a congestion experienced (CE) bit as a predetermined marked bit used in the IP header to indicate congestion status.

(iii) The Examiner relies on the disclosure of Simcoe to remedy the deficiencies of Hadi Salim.

III. REPLY TO NEW ARGUMENTS

Appellant respectfully offers the following in reply to the new arguments raised by the Examiner in the Examiner's Answer to the Appellant's Brief:

(i) The Examiner relies on column 2, lines 22-30, of Hadi Salim, as disclosure that a CE bit is used to control the packet flow. However, Appellant respectfully submits that such disclosure is directed to a congestion experienced (CE) bit for the explicit congestion echo (ECE) bit in the TCP header of a

2

prior art teaching (i.e., Floyd) disclosed by Hadi Salim.

Hence, nowhere does Hadi Salim, nor the prior art teaching

(i.e., Floyd) disclose, or even suggest, "determining a flow

rate associated with a plurality of packets entering or exiting

the network," as claimed. Specifically, Hadi Salim discloses

that the prior art teaching (i.e., Floyd) teaches that the

congestion causing packets are marked on their way to the

receiver end system (from the sender end system), with a

probability proportional to their bandwidth usage, using the CE

bit in the IP header. *See,* column 2, lines 22-27. In contrast,

Hadi Salim discloses determining a congestion level via an ICMP

source quench (ISQ) message. *See,* Figure 4, column 6, lines 38-

54. Therefore, Appellant respectfully submits that the Examiner

erred in interpreting the CE bit of the prior art teaching

(i.e., Floyd) disclosed by Hadi Salim as the CE bit of the ICMP

source quench (ISQ) message of Hadi Salim.

Also, Appellant respectfully submits that Hadi Salim merely

discloses a packet flow control parameter generated by a packet

flow control parameter generator in response to packet reading

means for determining if the packet has been marked according to

the Internet Protocol by any of the nodes through which the

packet passed. In addition, Hadi Salim at best, discloses

detecting incipient congestion at a node (e.g., a router).

3

Thus, Appellant respectfully submits that detecting incipient congestion at a node of Hadi Salim cannot be interpreted as a disclosure of "determining a flow rate associated with a plurality of packets entering or exiting the network," as claimed.

In addition, Appellant respectfully submits that Hadi Salim merely discloses detecting incipient congestion at a node using a random early detection (RED) process, wherein the RED process monitors average queue lengths using a low pass filter. *See*, e.g., column 7, lines 7-13. Therefore, Appellant respectfully submits that Hadi Salim merely discloses monitoring average queue lengths to detect incipient congestion at a node and fails to disclose, or even suggest, "determining a flow rate associated with a plurality of packets entering or exiting the network," as claimed. Moreover, Hadi Salim discloses "preferably the packet flow control parameter comprises an offered window size, for indicating to the source node how many packets can be sent before the source should wait for an acknowledgement from the receiver." *See*, e.g., column 3, lines 33-37. Therefore, the packet flow control parameter of Hadi Salim determines how many packets can be sent and not "determining a flow rate associated with a plurality of packets entering or exiting the network," as claimed.

4

(ii) The Examiner misinterprets column 5, line 65, to column 6, line 15, of Hadi Salim, as disclosure of "marking at least one predetermined bit in at least one of the plurality of packets if the flow rate is greater than a predetermined rate," as claimed. Appellant respectfully submits that the present patent application does not claim a CE bit as a predetermined marked bit used in the IP header, as alleged by the Examiner, but "marking at least one predetermined bit in at least one of the plurality of packets if the flow rate is greater than a predetermined rate," as claimed. Moreover, the Examiner cites to column 1, lines 44-59, of Hadi Salim to teach that predetermined bits or marked bits are specifically flagged to measure the flow of packets. Appellant respectfully submits that column 1, lines 44-59, of Hadi Salim fails to disclose, or even suggest, "marking at least one predetermined bit in at least one of the plurality of packets if the flow rate is greater than a predetermined rate," as claimed. In contrast, Hadi Salim discloses that at intermediate nodes, a flow is allocated a share of the "knee capacity" (i.e., an optimal load for router operation beyond which the router is operating in an overload condition and router efficiency declines), and if the allocation is exceeded, a flag is set in each packet. Therefore, Appellant respectfully submits that Hadi Salim, at

5

best, discloses marking packets when a flow exceeds an allocated "knee capacity" at an intermediate node and fails to disclose, or even suggest, "marking at least one predetermined bit in at least one of the plurality of packets if the flow rate is greater than a predetermined rate," as claimed.

(iii)   The Examiner relies on the disclosure of Simcoe to remedy the deficiencies of Hadi Salim. Appellant respectfully disagrees.   Specifically, Appellant respectfully submits that Hadi Salim discloses TCP/IP networks, for example, Host A may send data to another Host B, across an IP network. In contrast, Simcoe discloses a congestion management technique for achieving an "end-to-end" data flow rate that is supported by a lossless communications   network,   such   as   an   InfiniBand   (IB) communications   network.   For   example,   an   InfiniBand   (IB) architecture   specification   defines   a   connection   between processor nodes and high performance I/O nodes such as storage devices.   Therefore, Appellant respectfully submits that it would not have been obvious at the time the invention was made to incorporate the InfiniBand (IB) architecture of Simcoe for the TCP/IP network of Hadi Salim.

IV.   CONCLUSION

6

It is therefore respectfully submitted that the combined Hadi Salim and Simcoe references provide no teaching or suggestion of recited claim elements in the present application. Also, the combined references fail to teach the specific advantages achieved by the claimed invention. Further, the combination is unmotivated and inconsistent with the teachings of the references themselves. Accordingly, Appellant submits that the Hadi Salim and Simcoe references do not provide any teaching or suggestion which would lead to the features or advantages of the claimed invention, and that the claims of the present application patentably define over the Hadi Salim and Simcoe references. Rejection of all the pending claims under 35 U.S.C. § 103 is in error and reversal of the rejections of the appealed claims is clearly in order and is courteously solicited.

Respectfully submitted,

Hunton & Williams LLP
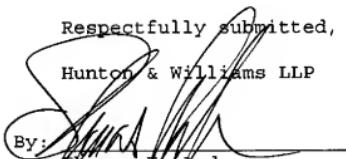
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7